



Genetic Profile Distinguishes Types of Stem Cells

Posted: September 18, 2008

Created: 18/09/2008 - 11:42

Researchers at the The Scripps Research Institute found a new way of classifying the many cell types that fall under the category of "stem cells." The term stem cell refers to tissue specific stem cells found in mature tissues such as blood, brain, or muscle, which are restricted to forming only cells found in those tissues, as well as to embryonic stem cells that are broadly able to form all cells of the body. The term is also used to refer to the so-called induced pluripotent stem (iPS) cells that scientists can now create out of adult skin cell and that mimic embryonic stem cells in their ability to form a variety of cell types. In this work, the researchers discovered a set of genes that are always active in the pluripotent cells â whether they were iPS cells or embryonic stem cells. As more stem cell populations become available, the gene profile discovered in this study will help researchers distinguish those cells that are truly pluripotent from those that are more restricted in the cell types they are able to form.

Nature: September 18, 2008 CIRM funding: Louise Laurent (T1-00003)

Related Information: Scripps news story, The Scripps Research Institute

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